OIP Attorney's Docket: 062891.0872

PATENT 09/347,034 | - 8

1



U.S. PATENT AND TRADEMARK OFFICE

In re Application of:

Albert et al.

Serial No.:

09/347,034

Filing Date:

July 2, 1999

Group Art Unit:

2157

Examiner:

Barbara N. Burgess

Title:

INTEGRATING SERVICE MANAGERS INTO A

ROUTING INFRASTRUCTURE USING

FORWARDING AGENTS

Honorable Assistant Commissioner

for Patents

Washington, DC 20231

RECEIVED

JAN 0 7 2003

Technology Center 2100

Dear Sir:

TRANSMITTAL OF FORMAL DRAWINGS

Transmitted herewith are ten (10) sheets of formal drawings to be substituted for the informal drawings initially filed in the above-identified application for patent.

Respectfully submitted,

BAKER BOTTS L.L.P. Attorneys for Applicants

Charles S. Fish

Reg. No. 35,870

2001 Ross Avenue, Suite 600 Dallas, TX 75201-2980 (214) 953-6509

Date: January 3, 2003

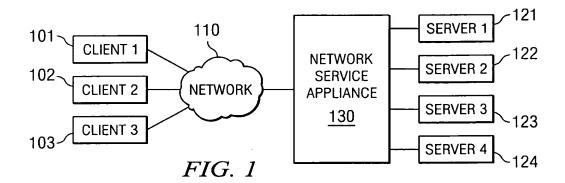


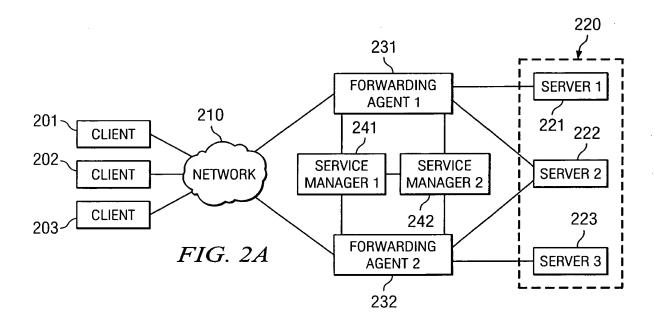
INTEGRATING SERVICE MANAGERS INTO A ROUTING INFRASTRUCTURE USING FORWARDING AGENTS
Inventors: Albert et al. Sheet 1 of 10

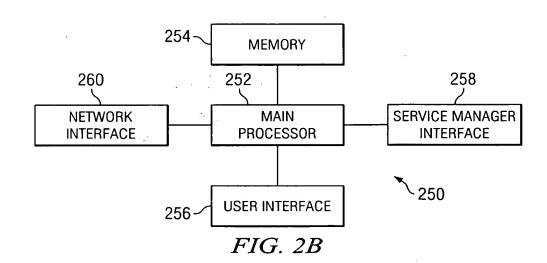
U.S. Serial No. 09/347,034

Express Mail No. EV 193175716 US 062891.0872











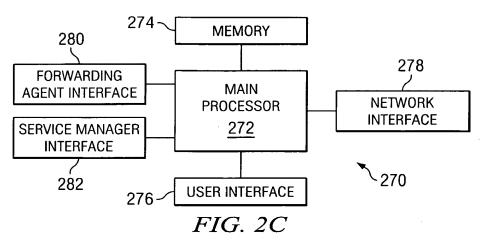
INTEGRATING SERVICE MANAGERS INTO A ROUTING INFRASTRUCTURE USING FORWARDING AGENTS

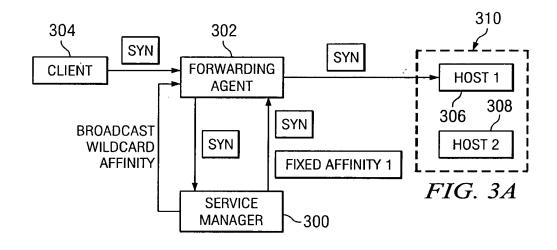
Inventors: Albert et al. Sheet 2 of 10

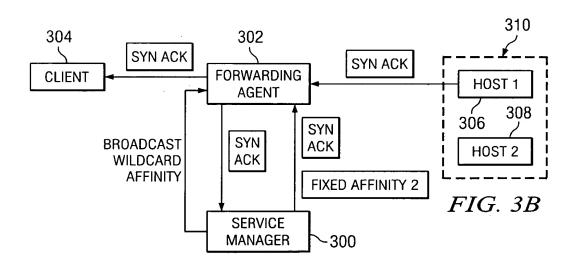
U.S. Serial No. 09/347,034

Express Mail No. EV 193175716 US 062891.0872







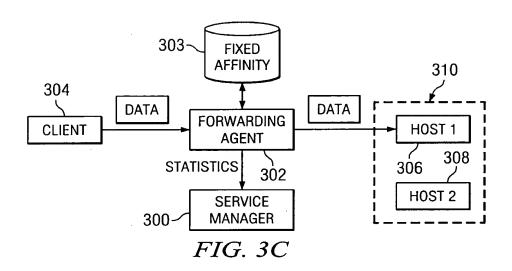


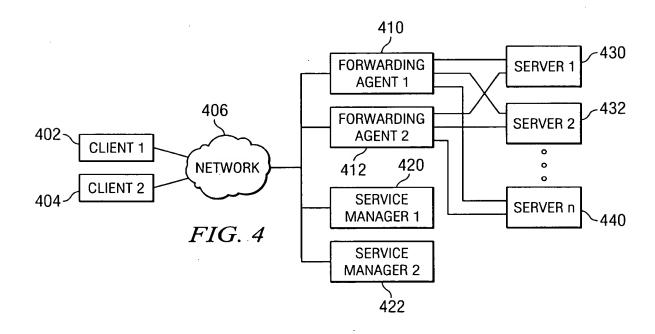


INTEGRATING SERVICE MANAGERS INTO A ROUTING INFRASTRUCTURE USING FORWARDING AGENTS Inventors: Albert et al. Sheet 3 of 10 U.S. Serial No. 09/347,034

Express Mail No. EV 193175716 US 062891.0872

3/10





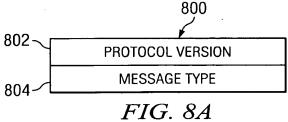
INTEGRATING SERVICE MANAGERS INTO A UTING INFRASTRUCTURE USING WARDING AGENTS Inventors: Albert et al. Sheet 4 of 10 U.S. Serial No. 09/347,034 Express Mail No. EV 193175716 US 062891.0872 4/10 502 510 500 506 SYN SYN HOST 1 **CLIENT** FORWARDING AGENT 1 SYN **WILDCARD** SYN **AFFINITY FIXED AFFINITY 1** 504 **SERVICE MANAGER** SYN ACK DATA DATA **SYN ACK** DATA FIXED AFFINITY 2 **AFFINITY** FIXED SYN ACK **FORWARDING AGENT 2** FIG. 5 DATA 512 HOST 2 507 700 702-DISPATCH FLAG 704-INFORMATION FLAG 706-600 **PROTOCOL** 708-602-**SOURCE IP ADDRESS AFFINITY KEY** 710-604 SOURCE NETMASK **DISPATCH FLAG** 712~ 606-**DESTINATION IP ADDRESS** INFORMATION FLAG **DESTINATION NETMASK** FORWARD IP ADDRESS 714~ 608 SOURCE PORT TIME TO LIVE 716-610 **DESTINATION PORT** 718-FIG. 6 FORWARD IP ADDRESS 720-TIME TO LIVE 722 FIG. 7

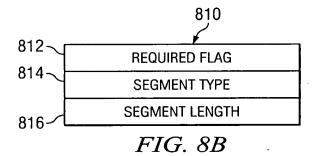


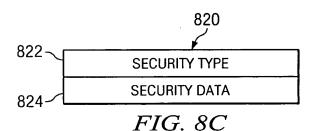
INTEGRATING SERVICE MANAGERS INTO ROUTING INFRASTRUCTURE USING FORWARDING AGENTS Inventors: Albert et al. Sheet 5 of 10 U.S. Serial No. 09/347,034

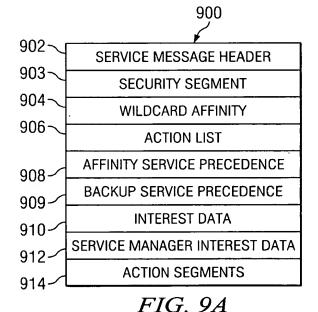
U.S. Serial No. 09/347,034 Express Mail No. EV 193175716 US 062891.0872

5/10









| | 920 |
|------|-------------------------------|
| 000 | <u> </u> |
| 922~ | SERVICE MESSAGE HEADER |
| 924~ | SECURITY SEGMENT |
| 926~ | FIXED AFFINITY |
| 928~ | AFFINITY SERVICE PRECEDENCE |
| 929~ | BACKUP SERVICE PRECEDENCE |
| 930 | ACTION SEGMENTS |
| 932- | IDENTITY INFORMATION |
| 934- | SERVICE MANAGER INTEREST DATA |
| | FORWARDING AGENT |
| 936 | INTEREST DATA |
| 938- | IP PACKET SEGMENT |
| 300 | FIG. 9B |

940 941-SERVICE MESSAGE HEADER 942-**SECURITY SEGMENT** 944-**ACTION LIST SEGMENT** AFFINITY SEGEMENT 946-(FROM ORIGINAL AFFINITY) IDENTITY INFORMATION (FROM ORIGINAL AFFINITY) 948~ SERVICE MANAGER INTEREST DATA 950-FORWARDING AGENT 952-**INTEREST DATA**

FIG. 9C



INTEGRATING SERVICE MANAGERS INTO ROUTING INFRASTRUCTURE USING FORWARDING AGENTS Inventors: Albert et al. Sheet 6 of 10 U.S. Serial No. 09/347,034

Express Mail No. EV 193175716 US 062891.0872

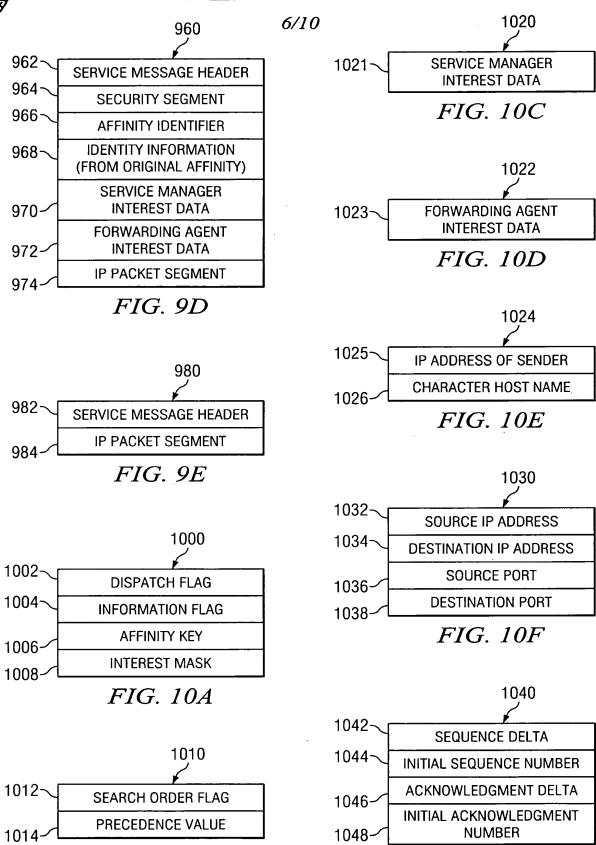
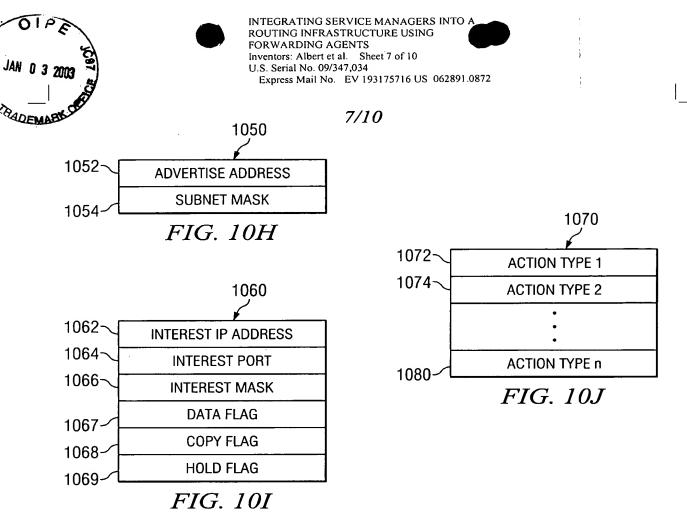
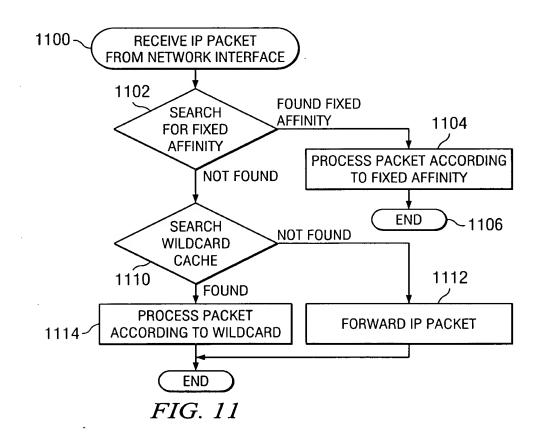


FIG. 10G

FIG. 10B





JAN 0 3 2003

INTEGRATING SERVICE MANAGERS INTO A ROUTING INFRASTRUCTURE USING FORWARDING AGENTS Inventors: Albert et al. Sheet 8 of 10 U.S. Serial No. 09/347 034

U.S. Serial No. 09/347,034 Express Mail No. EV 193175716 US 062891.0872



NO

NO

NO

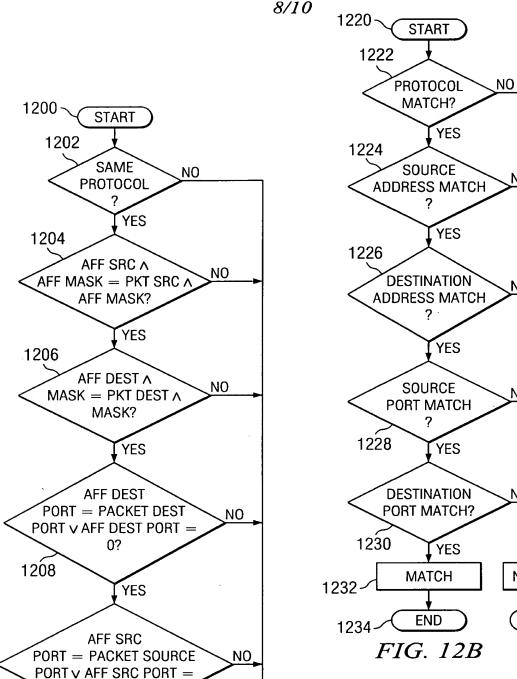
NO

1223

NO MATCH

END

1225



NO MATCH

1212

0?

MATCH

END

FIG. 12A

YES

1210

1211-

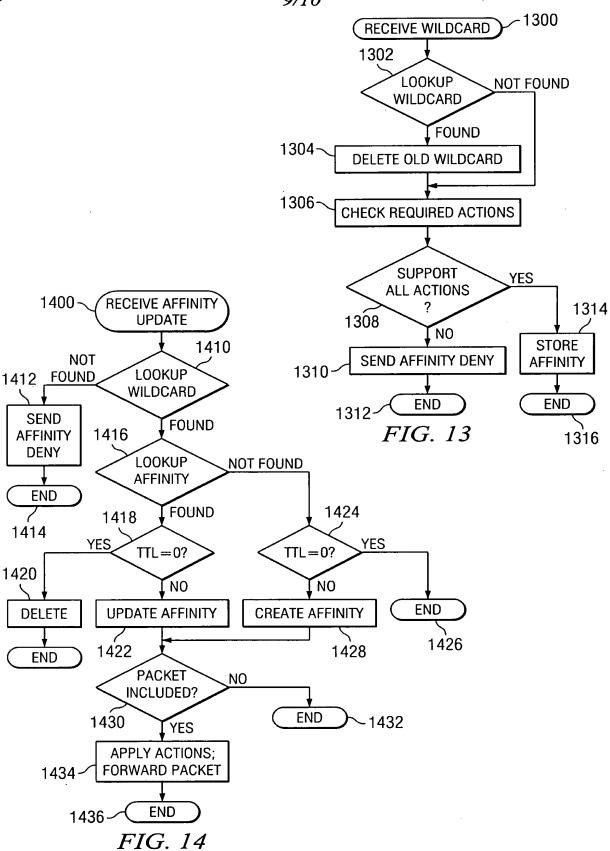


INTEGRATING SERVICE MANAGERS INTO A ROUTING INFRASTRUCTURE USING FORWARDING AGENTS

Inventors: Albert et al. Sheet 9 of 10 U.S. Serial No. 09/347,034 Express Mail No. EV 193175716 US 062891.0872



9/10





INTEGRATING SERVICE MANAGERS INTO A DUTING INFRASTRUCTURE USING RWARDING AGENTS

Inventors: Albert et al. Sheet 10 of 10 U.S. Serial No. 09/347,034 Express Mail No. EV 193175716 US 062891.0872



